Retooling Social Security for the 21st Century

by C. Eugene Steuerle and Jon M. Bakija*

Because of the imbalance between promised benefits and available taxes, some reform of Social Security is inevitable. At the same time, perceptions of Social Security are changing rapidly as it moves away from a system where all recipients—whether rich or poor—received more in benefits than they paid in taxes, and where those who were richer consistently received larger net transfers than those who were poorer. Reform is most likely to succeed if it returns to basic principles such as progressivity, equity, and efficiency.

Although these principles sometime conflict, they also provide much common ground. For example, if Social Security is meant to meet the greatest needs of the elderly, then increasing the retirement age (which mainly affects the younger and richer elderly) would be preferable to removal of the cost-of-living adjustment (which mainly affects the older and poorer elderly). Efficiency and equity principles, in turn, call attention to some groups—second earners in households, those with few employee tax preferences, those who work many years, and elderly workers—whose net benefits are lower than others who should have less claim to Social Security resources.

Introduction

Social Security represents one of the largest and most successful of the Nation's social insurance programs. It provides cash and health insurance to the elderly and disabled, removes millions from conditions of poverty, and gives the elderly the means to live their last years with dignity. Because of these tremendous achievements. the program is extremely popular, and politicians are understandably reluctant to "tamper" with it. Growing numbers of people are coming to realize, however, that reform of Social Security is both inevitable and desirable-inevitable because an imbalance between projected revenues and promised benefits will require legislative action sooner or later, and desirable because any program that commands so many resources should certainly be designed to work as fairly and efficiently as possible, and to respond to the changing needs and priorities of the Nation.

This article offers a summary of our recent book, Retooling Social Security for the 21st Century, which provides a detailed examination of the Social Security system and many options for reform. To begin, we outline a set of principles that are useful for evaluating government tax and transfer policies such as Social Security. Second, we offer a concise discussion of the long-run financial problems, which make reform of the Social Security system inevitable. To put the debate over reform into perspective, we next examine some of the ways that Social Security operates and the circumstances of the elderly. This analysis covers such issues as sources of growth in Social Security spending, the distribution of benefits and taxes within and across generations, different measures of the economic well-being of the elderly, the impacts of Social Security on certain important economic decisions, and how fairly the program treats different types of families relative to each other.

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Finally, we look at a variety of reform options in light of the principles and analysis presented earlier.

Principles

Too many discussions of Social Security reform start with a set of proposals before a framework for assessing alternatives has been established. Any effort to understand why the Social Security system is the way it is, and to develop thoughtful judgements regarding potential reforms, can benefit greatly by starting from a set of principles. Principles provide a set of criteria against which particular features of a program or proposed reforms can be judged as "better" or "worse," "welldesigned" or "poorly designed." Quite simply, if any system is to be made better—however vague that goal may at first appear—there must be some standards against which the goal can be measured. In many cases, there is no simple answer, as different principles compete with each other and require compromise. Nonetheless, a set of principles provides a framework for thinking about the issue and allows us to honestly assess the inevitable trade-offs in a rational and rigorous way.

Economists in the field of public finance often use just such a set of principles for thinking about how government taxation and spending policy should work. These principles can be summarized under four categories: (1) economic efficiency, (2) individual equity (or the "benefit principle"), (3) vertical equity (or progressivity), and (4) horizontal equity (or equal justice).

A situation is deemed to be economically efficient when no one can be made "better off" without anyone else being made "worse off;" in other words, there is no pure waste. Efficiency means that economic resources are employed in a way that helps yield the greatest possible satisfaction of consumer demands. One of the most fundamental precepts of economic theory, dating back at least to Adam Smith, is that under normal conditions, when consumers and firms are left to pursue their own self-interests as they choose, the operation of a free market will tend to lead towards efficient outcomes. Anything that interferes with the incentives and prices of the free market—that is, with individuals' ability to make exchanges that enhance each other's well-being—has the potential of producing waste and inefficiency.

There are, however, situations in which the market is unable to produce efficient outcomes by itself. These are known broadly as "market failures." One type of market failure involves "public goods," goods that benefit everyone, but which would be undersupplied by the private market. For example, it would be very difficult for a private firm to provide national defense or criminal justice. For one reason, there would be no credible way to deny these services to people who refuse to pay, so it would be hard for a private firm to be able to cover its costs. In such cases, it may be possible for the government to make *everyone* better off, for example, by taxing the public and using the proceeds to provide a strong and fair criminal justice system. There are many other types of market failure, such as monopolies, pollution, inability of inventors to

capture the returns to society from their work, and the like which we will not examine here.

While economic efficiency involves mutual trades where some or all people can be made better off without making anyone else worse off, government is often concerned with questions that involve making some people better off at the expense of others. At times, a society may choose to address these questions even if some waste or inefficiency partially offsets the gains that society perceives it is achieving. Here, especially, issues of equity or fairness come into play.

One approach to equity is to keep things as close to the workings of the free market as possible. In this view, it is not only efficient but also fair to simply "get what you pay for" both in private markets and from the government. For example, if the government needs to provide certain public goods, one may consider it "fair" that each individual be charged an amount that reflects as closely as possible the benefit he or she derives from that provision. This application of the principle of "individual equity" is sometimes known as the "benefit principle" by economists.

In the United States, most spheres of our lives are left up to our individual decisions in private markets and governed by the individual equity principle. A strict application of the principle of individual equity in all areas of life, however, would be greatly at odds with the conceptions of fairness held by the vast majority of people in a democracy. A society could exhibit perfect economic efficiency and individual equity, yet suffer from tremendous inequality of both opportunity and outcome. Most agree that there is some scope for the government to redistribute resources to help the truly needy, to make sure everyone can get some basic services such as an education, and to charge people taxes based not just on some estimate of the benefits they receive, but according to their respective abilities to pay. This notion of fairness, for example, has led to the adoption of a tax system that charges higher taxes and even higher rates of taxation to higher income people than to lower income people. We will refer to the idea that there should be at least some redistribution from the better off to the worse off as the "progressivity principle." Keep in mind that once government attempts to shift resources toward the greatest needs in society, it almost inevitably will become progressive.

One final question of equity involves how to treat different people who are at *equal* levels of ability or well-being, regardless of how people at different levels are treated. The principle of "horizontal equity" simply states that equals should be treated equally. For example, if you and I have equal incomes and are equal in all other respects, then we should pay the same income tax. To the extent that there is redistribution toward the needy, those with equal needs and in equal circumstances ought to be provided with equal amounts of assistance. While this principle seems intuitively obvious, it is frequently violated in subtle ways by government policies, and many reform efforts are motivated by a desire to restore horizontal equity in these situations.

Naturally, these principles sometimes conflict with each other, and thus do not always provide us with clear-cut answers

as to how to proceed. Compromises and value judgements are unavoidable. This does not mean that there is no meeting ground. No reform that both makes the system regressive and fails to provide any return on contributions, for instance, can be viewed as compromising between progressivity and individual equity. Even in the cases where it comes down to a value judgement, principles make clearer the nature of the necessary trade-offs.

Why We Have a Social Security System

With these principles as background, we can delve into the question of why we have a Social Security system in the first place, and why it is structured the way that it is. Of course, political calculations are often more important than principles in explaining how policy is shaped, but principles clearly do play some role in the design of Social Security.

Perhaps the most fundamental reason for the adoption of a Social Security system was the desire for some progressive redistribution to help meet the needs of the elderly. There has always been a significant portion of the elderly population that becomes destitute upon losing the ability to work or becoming widowed; this problem was made much worse when the Great Depression wiped out many peoples' lifetime savings. Redistribution was easy to justify in light of these problems.

The U.S. Social Security system, however, goes well beyond a simple welfare program for destitute elderly people. It mixes a significant amount of redistribution towards low- and moderateincome elderly people with a universal annuity system that collects contributions from, and eventually pays retirement benefits to, virtually all workers in the country. As such, it is meant to represent a compromise between the principles of individual equity and progressive redistribution. This compromise is implemented partially through a progressive benefit formula. All workers pay a payroll tax or "contribution," half paid directly by the employee and the other half by the employer, on wages up to a certain level. Social Security retirement benefits are then determined based on the amount of wages upon which payroll taxes were paid over a lifetime. People who earned higher wages, and thus paid more in taxes, receive larger benefits. The relationship between benefits and past earnings is far from proportional, however, which is where the progressivity comes in. Low-wage workers receive benefits that are a higher percentage of past earnings, but lower in absolute dollars, than do high-wage workers. This arrangement can effectively redistribute resources from those with high-lifetime earnings to those with low-lifetime earnings within each generation.

While the progressive benefit formula is a transparent example of a compromise between individual equity and progressivity, there are many other kinds of redistribution that occur in Social Security that do not so neatly follow either principle. For one thing, there has been a tremendous amount of redistribution from later generations to earlier ones, as benefit payments have greatly exceeded what could have been bought with lifetime contributions. In the sense that later generations

have been more prosperous on average than earlier ones, this is progressive, but in practice the transfer involved redistributing money towards many elderly people who were not needy at all and had paid little in the way of contributions. Another kind of redistribution determined by Social Security involves the implicit transfer of funds from two-earner couples and single people towards traditional one-earner couples, including many with high incomes. Both of these issues will be examined more closely below.

The reasons for redistributing income towards needy elderly people are fairly obvious and do not engender much controversy from most quarters. On the surface, Social Security's mixture of individual equity and progressivity seems like a fair compromise that ought to please almost everyone. This begs the question, however, of why there needs to be an individual equity component in the public program at all. Why not just have a small program to redistribute income towards the very needy elderly, and leave the broader provision of retirement annuities to the private market?

The principles we discussed earlier provide a partial explanation. There are a number of ways that a more universal public annuity may produce an efficient, or at least not very inefficient, solution. One argument that held particular sway at the time Social Security was adopted was that private saving for retirement was very risky, and private markets could not provide adequate protection against this risk. The universal annuity component of Social Security could thus correct a "market failure" and make everyone better off by providing some base level of protection against such risks. This argument became considerably more persuasive in the wake of the Great Depression. Although perhaps less persuasive today—a number of risks can now be handled outside of Social Security—there is still no private sector insurer that can guarantee a base level of support over the broad range of economic circumstances against which government insurance is provided.

A second efficiency-related argument relies on the idea that individuals may want to pre-commit themselves to certain forms of action in order to avoid irrational but tempting behavior. People may believe that, if given the choice, they would give in to temptation and fail to save sufficiently for retirement, or consume their savings prematurely. Under these conditions, it could be efficient to have a government program that forces people to save. This goal, however, could conceivably be achieved through mandatory private saving instead of a public program like Social Security.

A more persuasive argument for universal annuities has to do with the problems associated with a "means-tested" welfare program. A means-tested program is one that provides benefits only to those with low incomes. Means testing helps make a public program less expensive, but unfortunately it can also affect incentives in ways that may be both inefficient and unfair. If the government reduces the value of my total old-age benefits by \$1 for every \$2 I have saved, for instance, it will distort enormously the decisions I make about whether or not to save. Even much less harsh means tests are likely to produce a low or negative after-tax rate of return to saving, as

well as a penalty on working in old age. The horizontal equity violations are also quite severe. Suppose taxpayer A and taxpayer B have equal lifetime incomes, but only A saves for retirement. Taxpayer A is rewarded for his or her prudent behavior by being forced to transfer money to taxpayer B.

These sorts of efficiency and equity problems would be particularly difficult to avoid in a means-tested retirement program. Many who are not poor initially, or would never be poor in absence of the program, can change their behavior enough so that they end up qualifying for the program. When assessment of need is made at retirement, this is especially easy. Mid- or high-income earners can simply consume all of their earnings or give those earnings away to their children. When they retire, they qualify for poor support.

The efficiency and equity problems associated with meanstested redistribution can be mitigated considerably in a more universal program such as Social Security. If everyone at all income levels is made to contribute to some system in their preretirement years, then everyone will have borne part of the cost of their own retirement. Analogous arguments are made in favor of requiring all persons to purchase automobile insurance or health insurance. The case here is mainly one of horizontal equity and efficiency, not progressivity. By reducing the number of free riders—those who could have paid for their own retirement, but did not-mandated insurance at all income levels can effectively reduce the net amount of redistribution and the amount of net taxes (in excess of benefits) needed for redistribution. Because redistribution is based on a lifetime measure of earnings, it is more difficult to game the system in order to get subsidies; making oneself appear poor upon retirement doesn't help. Still, it is possible that some of these same advantages could be achieved with a mandatory private savings program.

Finally, once a mandatory government annuity system is set up on a pay-as-you-go basis, as our Social Security system is, efforts to privatize the annuity component can potentially cause important equity problems. The U.S. Social Security system paid large transfers to the first generation of retirees. Subsequent generations then had to transfer income to the generation that paid for the early transfers, if promises of individual equity were to be honored. This process would have to persist indefinitely into the future if the system was to continue adhering to individual equity standards.

As the system now stands, there are several trillion dollars worth of liabilities to current and future retirees for which funds have not been set aside. Past contributions for the most part have already been spent; promises based on those contributions can be met only by taxing current and future workers. Because current retirees' benefits are paid for mainly by current workers, converting contributions into private investment would require either abandoning current retirees or forcing the current generation of workers to pay twice—for both themselves and current retirees. Either option would violate notions of individual equity; people would either lose benefits that had been promised to them and for which contributions were made, or the current generation of workers would be required to pay

twice for only one benefit. Privatizing Social Security may still be valuable as a means of trying to increase societal saving, but it cannot yet avoid the dilemma posed by equity issues associated with the transition.

Clearly, there are some principled reasons why the Social Security system was set up the way that it was, and why it continues in this form today. This is not to say that the judgement calls were always correct, or that if we were setting up a retirement system from scratch today the existing plan would be the best of all possible policies. Indeed, the rest of our article focuses on problems with the existing system and proposals for fixing them. Nor were principles the only guide to Social Security's development. Purely political factors obviously played an important role. Perhaps the most important of these was that the combination of a universal annuity program with the redistributive component of Social Security helped obscure the redistribution, thereby making it more sustainable politically in its early decades. To paraphrase the old aphorism, a program for the poor always turns out to be a poor program. Opinions regarding this political strategy naturally differ; some view it as undemocratic to "fool" people into supporting more redistribution than they might otherwise agree to, while others view it as necessary to "assure" that all of the elderly obtain some decent benefit. In any event, the strategy was quite successful; Social Security remains immensely popular among all age groups. This popularity is about to be tested, however.

Why Reform is Inevitable

Some kind of change in Social Security is inevitable. Unless something is done, promised benefits will almost certainly exceed available revenues within the system by a significant margin, beginning when the baby boom generation retires in the beginning of the next century and continuing indefinitely. This turn of events will require legislators to take some action. The reasons why this is expected to happen are fairly well known but worth summarizing. ¹

First of all, a number of demographic trends have contributed to a large increase in the number of retirees relative to the rest of the population, and this increase will turn into a dramatic surge early next century. A major cause that has been a fairly steady influence is the increase in life expectancies. More people are reaching retirement in the first place; 72.3 percent of men survived from age 21 to age 65 in 1990, compared with just 53.9 percent in 1940; for women the figure rose from 60.6 percent to 83.6 percent. Upon reaching retirement, moreover, people are living longer. The average life expectancy of men at age 65 rose from 12.7 more years to 15.3 more years between 1940-90; the corresponding increase for women was from 14.7 years to 19.6 years. These figures are projected to rise to 17.2 years for men and 21.5 years for women by the year 2030. ²

A second force pushing up the relative size of the retired population has been a steady trend towards earlier retirement. Between 1950-91, the share of men older than age 65 participating in the labor force declined sharply from 45.8 percent to just 15.8 percent. Among women, the share stayed low, falling from

9.7 percent to 8.6 percent, despite massive increases in labor force participation for younger women. The average age at first receipt of Social Security benefits was 63.7 for men and 63.5 for women in 1991, compared with 68.7 and 68.0, respectively in 1950.

A third well-known factor that will have a big impact in the future is the pattern of birth rates in this century. Birth rates were fairly low in the 1920s and 1930s, so the cohort retiring right now is fairly small. Following World War II, however, birth rates surged dramatically, producing a baby boom that lasted well into the 1960s. Since then, births have fallen again to a fairly low rate. The result: Currently, we have a large working population, bolstered by the enormous baby boom, taking care of a relatively small generation of retired people. Starting around 2010, the leading edge of the baby boom will begin to retire, and they will have to depend on the much smaller generation that follows for the payroll taxes to finance their benefits.

The confluence of these factors can be summarized by looking at the ratio of Social Security retirement beneficiaries to workers. This ratio is expected to increase from 26.6 beneficiaries per 100 workers in 1990 to 42.7³ per 100 workers in 2030, a 60-percent increase.

While the potential for these demographic trends to produce financial strain in a pay-as-you-go retirement system is evident, there is another part of the story that is quite important. Social Security benefits have grown strongly in real, inflation-adjusted terms over the course of its history, and under current law they will automatically continue to grow steadily for each generation of future retirees. The initial benefit level for a cohort of retirees is automatically indexed to increase by the same amount as wages grow from one cohort to the next. Real wage growth, therefore, produces real benefit growth for each successive cohort of retirees, and Social Security benefits are automatically programmed to keep pace with growth in the economy. Medicare benefits, meanwhile, grow even faster than the economy because of the rapid rise in health-care costs. When programs already structured to grow as fast or faster than the economy are applied to an elderly population that will grow dramatically as a share of the total population, spending can be expected to increase tremendously relative to the economy. Unless taxes increase so that they, too, absorb a greater share of the national economy, large deficits will result.

There are some features already adopted in current law that will help slow the growth in costs at least a bit. First, the normal retirement age is scheduled to increase gradually from 65 to 67 during the beginning of the next century. Second, some of the benefits of upper income retirees have now become subject to income taxation. This effectively reduces net benefit outlays by the government. The thresholds at which taxation kicks in are not indexed for inflation, so a growing portion of benefits will be subject to taxation as we move into the future. These features help, but do not solve the problem entirely.

One way of putting this issue into perspective is to consider how benefits, taxes, and deficits are expected to change relative to the size of our economy, or gross domestic product (GDP). Under the intermediate projections of the Social Security Board of Trustees, Social Security cash benefits, net of income taxes imposed on them, are expected to rise from 4.8 percent of GDP in 1990 to 6.0 percent by 2030, a 25-percent increase. Put another way, the gap between Social Security cash benefits and revenues is expected to reach 3.1 percent of taxable payroll by 2030 (the 1997 Trustees Report now projects a deficit of 4.4 percent in 2030); that is, the payroll tax would have to rise by 3.1 (4.4) percentage points, or benefits would have to be cut by a comparable amount, to restore fiscal balance.

It is true that Social Security is currently accumulating a small "trust fund" in an effort to ease the future financial burden, but the nature of this trust fund is often misunderstood. The payroll tax is currently slightly higher than is needed to support benefit payments today. This surplus is invested in Federal Government bonds, which means the government does not need to sell as many bonds to the public to finance its overall budget deficit. Thus, the trust fund is effectively reducing the Federal deficit, which could help us in the future to the extent that it reduces interest rates, encourages more private investment, and thus leads to a more prosperous economy. Even this is subject to some debate, however, as some people believe that in the absence of the trust fund surplus, Congress and the President would cut spending or raise other taxes. Still, it seems likely that the trust fund is helping at least somewhat in keeping our economic deficit smaller than it otherwise would be.

When Social Security benefits begin to exceed revenues around 2012,4 the trust fund cash flow is supposed to reverse: the accumulated debts in the trust fund will be paid back by the government in order to help finance benefit payments. Looked at in the context of the whole government, however, this does not really provide any help at all. While it means extra money for Social Security will be available at that time, it also means that the government will have to cut back on spending or increase taxes elsewhere in order to raise the funds necessary to pay back the Social Security trust fund. For the Federal Government as a whole, including Social Security, the net result is a wash. The only real help provided by the trust funds is the first story we told earlier, that by reducing the federal deficit today, it may help future economic growth—and, if the money is not spent, reduce interest payments on that debt. In any event, the trust funds are expected to be exhausted by 2029.5

The upshot of all this is that Social Security will force the government to either raise taxes or cut spending starting early in the next century. When the trust funds are exhausted, benefit cuts or tax increases within Social Security itself will be required by law. If the best estimates of the Social Security Trustees are correct, the size of changes required will be significant, but perhaps smaller than one might expect based on the grim rhetoric often associated with this issue.

Our primary focus is on Social Security cash benefits.

However, when considering America's fiscal problems one cannot ignore the closely related health benefit programs for the elderly and disabled. Medicare spending has been growing much faster than the economy since its inception, driven largely by the rapid rise in health care costs, including doctors' salaries, technological advances, and so forth. When these rising costs are combined with a surging elderly population next century, there will be massive financial pressures placed on the Federal Government. The best estimates of the Health Care Financing Administration as of 1993 projected that Medicare would increase from 2.1 percent of GDP in 1993 to 7.06 percent in 2030. Any such projections are highly subjective, but these actually presume that Medicare spending per-enrollee will grow considerably slower in the future than it has in the past (a 3.2percent annual real growth rate from 1993 to 2030, compared with 5.1 percent from 1970 to 1990). Other government programs, such as Medicaid (two-thirds of which is spent on nursing-home care for the elderly and disabled), and interest on the debt can also be expected to exhibit rapid automatic growth. Even if health costs were to be brought under control today, the aging of the population will still raise demand considerably for health benefits under Medicare and Medicaid. These forces can be expected to put tremendous pressure on all government programs, including Social Security cash benefits.

A final issue to consider is that programs for the elderly are rapidly eating up an ever-increasing share of the government pie. Chart 1 shows the changing composition of the Federal budget from 1950 to 2002. Spending on retirement, health, and disability programs is expected to reach about half of the Federal budget soon, even before the baby boom generation retires. Adding in interest on the debt raises the share above two-thirds. As these forces persist into the next century, everything else that the government does is likely to be squeezed severely. While this does not necessarily produce a legal requirement that programs for the elderly be reformed, it does mean we are going to have to think carefully about our programs for the elderly if we want to have any control over setting priorities.

What If the Projections are Wrong?

All of the projections about the future state of Social Security depend on assumptions that are subject to error. The predictions seem reasonable based on historical experience, but some are undoubtedly more reliable than others. Much of the future growth derives from the retirement of the large baby boom population. There is little scope for error in that prediction, because these people have already been born and it is very unlikely there will be any dramatic increase in mortality for this generation. In fact, quite the opposite is possible. Mortality rates are projected to decline at about the same rate as they did on average over the course of the 20th century. However, improvements in mortality have been much more dramatic over the past three decades than previously. If this pattern continues the retired population could end up being even larger than predicted.

Economic projections are subject to considerably more error, but they only have a limited impact on the long-run financial balance of Social Security cash benefit programs because benefits are indexed to keep pace with whatever economic growth rate occurs. Still, better economic growth would have some positive impact on the financial balance in the system, and more importantly, would make any benefit cuts or tax increases that are required much easier to bear. The best estimates of the Social Security Trustees recently have assumed that real wages will grow at an average of about 1 percent (0.9 percent in the 1997 Trustees Report) per year in the future, which is about the same as the average since 1950. However, wage growth has been much slower over the last couple of decades than it was earlier in this period, so if this pattern continues, the projections would be a bit optimistic.

Overall, the projected financial problems for Social Security are based on fairly reasonable assumptions given historical experience. If there is any bias, it would seem to be in the optimistic direction, in the sense that financial difficulties are more likely to be worse rather than better than expected.

Some Features of Social Security and the Well-Being of the Elderly

If Social Security is to be reformed, it will be very important to know something about just how fair and efficient the current system is. In this section, we explore some facts about Social Security and the elderly that will be helpful in making an informed judgement about proposals for reform. First, we look at the size of Social Security benefits and how they change over time. Second, we closely examine how Social Security redistributes income within and across generations. Third, we survey evidence on the needs and economic status of the elderly. Fourth, we investigate the impact of Social Security on the incentive to retire. Finally, we look at the fairness of Social Security's treatment of spouses and survivors.

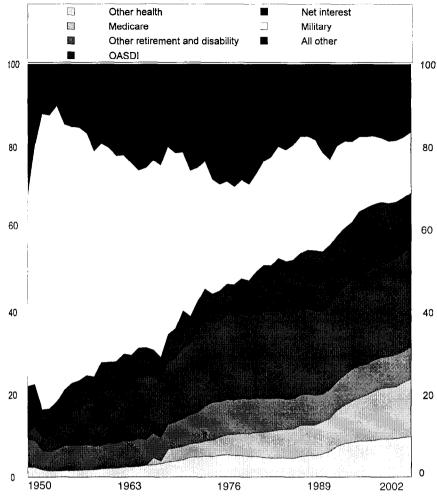
The Increasing Real Value of Social Security Benefits

Annual Social Security benefits have risen dramatically in real (inflation-adjusted) terms since the inception of the program. During Social Security's early decades, increases in real benefit levels resulted from a combination of wage growth and a variety of ad hoc legislative actions. As recently as 1972, for example, all benefits were increased across-the-board by 20 percent. Since 1974, annual benefit amounts for retirees have been automatically indexed to keep pace with inflation. Since the late 1970s, moreover, the benefit formula has been indexed in a way that keeps average real benefit levels growing for each successive cohort of retirees at roughly the same rate as economy-wide wages. Thus, as long as there is real wage growth, real benefit levels continue to increase for every new generation of recipients.

To illustrate changes in the real value of benefits over time,

Chart 1.—Change in the composition of the Federal budget, selected years 1950-2002





Source: The Urban Institute. C. Eugene Steuerle and Jon M. Bakija (1994). *Retooling Social Security for the 21st Century.* Calculations based on data from the President's budget proposal in the Budget of the United States Government, Fiscal Year 1997. Office of Management and Budget (1996).

as well as to explore many other issues, we will rely on a set of examples of hypothetical workers and their spouses from various cohorts. An average-wage worker is assumed to earn a wage in every year from age 21 until retirement at age 65 equal to the Social Security Administration's (SSA's) measure of the average national wage, approximately \$26,700 in 1997.7 A lowwage worker is assumed to earn 45 percent of this amount, and a high-wage worker is assumed to earn the maximum wage subject to Social Security taxation, \$65,400 in 1997. For illustrative purposes, a high-wage two-earner couple is assumed to include a high-wage husband and an average-wage wife, while average- and low-wage two-earner couples are assumed to include average- and low-wage men, respectively, married to low-wage women. Married couples are also assumed to have two children, and we calculate expected value of survivors benefits as well.

Chart 2 displays the real (inflation-adjusted) Old-Age and

Survivors Insurance (OASI) benefit paid in the first year of retirement for our set of hypothetical workers and spouses. Substantial increases in the real value of annual benefits can usually be seen for each successive cohort of retirees at each income level and marital status. Consider, for example, the OASI benefits going to single workers retiring at age 65 in 1990. Annual benefits for high-, average-, and low-wage workers are worth about \$13,600, \$9,700, and \$5,900, respectively, in constant 1993 dollars. In real terms, these are between 2.7 and 3.1 times as large as the annual benefits received by their counterparts in 1940. Benefits for married couples, of course, are much larger than for single individuals.

The real value of Social Security benefits will continue to climb steadily for future retirees if current law remains intact. Under the bestestimate projections of the SSA, for example, an average-wage worker retiring at age 67 in 2032 can be expected to receive a basic annual benefit, excluding spousal and other benefits, of about \$13,900 in constant 1993 dollars. Thus, as a result of growth in real wages, the purchasing power of his or her benefit would be approximately 42 percent greater than that of a similar worker who retired in 1995. For a high-wage worker, the increase is expected to be almost 61 percent in real terms. If this high-wage worker were married to someone earning the average wage, they could expect to receive combined benefits equal to about \$35,700 (in constant 1993 dollars) when they retire in 2032. This would be about 53 percent higher than the \$23,300 going to such a couple retiring in 1995.

Income taxation of Social Security benefits can be expected to offset some portion of the benefit growth, as the thresholds for taxation are

unindexed and decline in real value over time. The average tax rate on Social Security benefits can be expected to rise gradually from around 2 percent in 1993 to perhaps 7 or 8 percent by 2030. The reduction for a very few individuals at the very highest income levels could rise to about a third of benefits, but most recipients will continue to face only modest burdens, if any, from benefit taxation.

While these projections imply a fairly healthy growth in the value of Social Security benefits, a recent poll indicated that almost a third of nonretired Americans considered it "very likely" that Social Security payments would no longer be available at all when they retire (Yankelovich, Skelly, and White 1985). Although fears that the Nation will not be able to afford any Social Security benefits are unfounded, there are valid reasons to be skeptical of the benefit projections reported earlier. First of all, the fact that the system is imbalanced makes it likely that Congress will reduce the rate of future benefit

growth. Secondly, long-term economic projections are always uncertain. Despite these caveats, even with pessimistic assumptions about future wage growth and Congressional action, the real value of benefits for most future retirees is still likely to be higher than today's benefit levels.

How Social Security Redistributes Income

The Social Security system has a major impact on the distribution of lifetime income in our country among people of different income levels, generations, and family types. But very few people understand the nature of this redistribution. The extent of redistribution is essential to evaluating the fairness of the system and to putting the reform debate into perspective. Whenever any discussion of Social Security reform comes up, moreover, there are always objections from those who believe that they have earned every penny of their retirement benefits through their lifetime payroll tax contributions, so that any change would be tantamount to breaking a contractual obligation. To evaluate an objection like this, one needs to compare the value of lifetime contributions to the value of benefits received. The goal is not to determine whether everyone always gets his or her "money's worth"—redistribution generally makes it impossible for everyone to be a winner—but to assess the appropriateness of the redistribution that does take place. In this section, we summarize the results of just such an analysis that we conducted.

To get a picture of how lifetime Social Security contributions and benefits compare for people of various income levels, generations, and family types, we return to the hypothetical worker examples that we previously discussed. We calculate the private annuity that could have been purchased for each worker with his or her combined employer and employee Social Security contributions, and express it as a lump sum at age 65. Adjustments are made for the probability of death and payment of survivors benefits. When we are comparing benefits with taxes or contributions, we adjust for probability of death in each year after age 21. A 2-percent real (after-inflation) interest rate is assumed. Two percent is approximately the average real interest rate historically paid on government bonds in the Social Security trust fund. This is a somewhat arbitrary standard, but it seems reasonable given that Social Security provides riskfree, tax-preferred retirement income that is resistant to inflation and fluctuations in the economy and the stock market. (Our model has also been calculated at different rates such as 6 percent; although these figures are not featured in the book, they are available from the authors.)

The value of expected lifetime Social Security benefits after age 65, expressed in 1993 dollars, is then calculated. Benefits paid are discounted to reflect the fact that money received years into the future is worth less than money received today, and each year's benefit is weighted according to the probability that a person will be alive to receive the benefit in that year, given that he or she is alive at age 21. Subtracting the value of the annuity that could have been bought with contributions

from actual benefits gives us a measure of the "transfer" or "subsidy" received from the Social Security system.

Table 1 compares lifetime Social Security benefits and contributions for our set of hypothetical workers and families from five different cohorts. Chart 3 graphically illustrates the historical pattern and projected pattern of net transfers or subsidies—lifetime benefits less taxes—from the system for these hypothetical workers. Our calculations here include only the retirement and survivors portions of Social Security (OASI), as insufficient data regarding disability benefits was available to make reliable estimates. All amounts are expressed in constant 1993 dollars. A few striking facts emerge from these calculations.

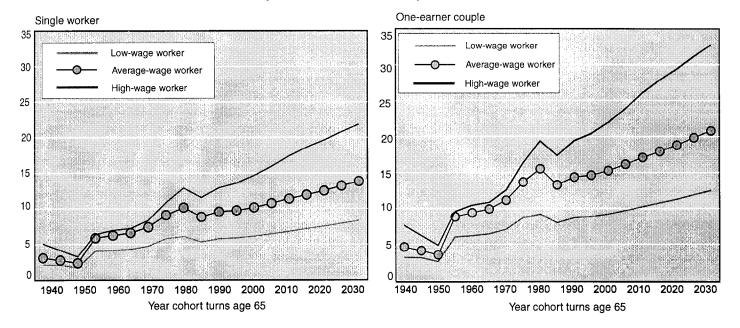
First, lifetime benefits have increased dramatically and are expected to continue growing, primarily because of rising real annual benefit levels and lengthening retirement spans. Consider, for example, an average-wage one-earner couple. Such a couple turning age 65 in 1960 could have expected to receive about \$98,900 in lifetime cash Social Security retirement and survivor's benefits, in 1993 dollars. By 1995, their counterparts could expect \$223,400 in benefits, a 126-percent increase. The growth in lifetime benefits is expected to moderate a bit in the future, but will still be strong. By 2030, an average wage one-earner couple turning age 65 can expect \$312,800 in benefits, a 40-percent increase over 1995.

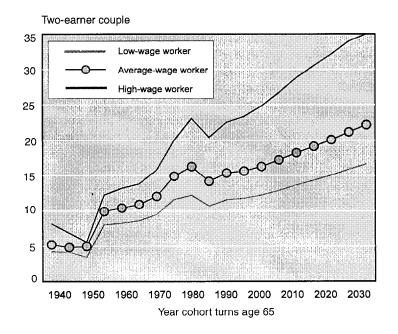
A second striking feature is that lifetime contributions were relatively modest not just for the initial recipients of Social Security in the 1940s, but for all generations of retirees up to today, even though lifetime taxes are growing much faster than lifetime benefits. Continuously increasing tax rates (as well as increases in maximum earnings subject to tax) have been required throughout Social Security's history to pay for longer retirement spans, more retirees relative to workers, and higher benefit levels. Each successive cohort has contributed to Social Security at higher tax rates and, in most cases, for longer periods of time. Those who retired at the beginning of 1960, for example, paid OASI taxes for 23 years at most, and never paid at a combined employer-employee rate higher than 4.5 percent. Steady workers retiring in the recent past have typically been subject to the payroll tax for 40 years or more, but also paid at relatively low rates for most of those years. Those retiring after 2030, by contrast, will have paid OASI taxes at combined employer-employee rates exceeding 10 percent over their entire adult lives.

The magnitude of growth in lifetime Social Security tax contributions is apparent in table 1. For an average-wage male worker in the cohort turning age 65 in 1960, the annuity value of lifetime OASI contributions was only about \$9,000. This figure increased more than eleven-fold in constant dollars, to \$100,800, for the cohort turning age 65 in 1995. Even without any further increases in payroll tax rates after 1995, the value of taxes paid by average-wage males in the cohort turning age 65 in 2030 is expected to nearly double in real terms, to \$195,800.

Turning to the net transfer or subsidy received from the Social Security system (that is, benefits minus taxes), a number

Chart 2.—OASI benefit in first year of retirement for hypothetical workers and spouses, selected years, 1940-2030. [Constant 1993 dollars, in thousands]





Note: Assumes retirement at the normal OASI retirement age and couples are the same age.

Source: The Urban Institute. C. Eugene Steuerle and Jon M. Bakija (1994). Retooling Social Security for the 21st Century. Based on data from the Board of Trustees of the OASDI Trust Funds (1993).

of interesting results become apparent. First, almost all individuals who have retired in any year between 1940 and the rest of the century—no matter what their income level or family type—have received large positive transfers from Social Security above and beyond the sum of their contributions to the system and a reasonable rate of return on those contributions. The largest subsidies went to those retiring

around 1980. A second and more surprising result is that for most of Social Security's history, the system has been *regressive within generations*. That is, within a given cohort of retirees, net transfers have been inversely related to need: People with the highest lifetime incomes have tended to receive the largest absolute transfers above and beyond what they contributed.

This latter result may appear counterintuitive given the "progressive" nature of the benefit formula. An example can illustrate how this could occur. Consider one-earner couple families from the cohort that turned age 65 in 1980. The annuity value of lifetime OASI contributions for a low-wage one-earner family was about \$22,900 in constant 1993 dollars. This family's lifetime OASI benefits are worth more than 5.6 times as much, or \$129,300, for a net transfer of \$106,400. A high-wage one-earner family's contributions, in turn, amounted to about \$71,900. Their benefits are worth about 3.7 times that amount, or \$264,300, for a net transfer of \$192,400. As one would expect from the way the benefit formula is structured, the lower income family receives a much higher rate of return on their contributions. More importantly, however, the absolute amount of money transferred to the high-income family is nearly double the size of the transfer going to the low-income family. The fact that any subsidy at all went to high-income people is hard to justify through either the individual equity or progressivity principles. The fact that high-income people actually received the largest subsidies is even harder to justify.

A third important pattern illustrated here is that net transfers will decline for most people among future generations of retirees, and the distribution of net transfers will become increasingly progressive within generations. The increased progressivity is not because low- and moderate-income people will be faring better under the system, but mainly because highincome people will have contributed so much more in taxes over their lifetimes that it will be difficult for them to recoup their investments. Under current law and SSA best-estimate assumptions, net transfers will decline slightly for most lowand average-wage persons retiring in the next century, but will still generally remain positive. Meanwhile, net OASI subsidies will gradually be phased-out for many high-income persons, and will turn sharply negative for some. The upshot is that while many subsidies given to past and current well-off retirees are very hard to justify, much—although not all—of it is water under the bridge.

Still, many middle and upper income households will continue to receive generous positive transfers from Social Security far into the future. Although the largest of positive transfers have been granted to those who retired in the past (particularly those who are now in their late seventies and early eighties), many current and future retirees will still receive significant net subsidies from the OASI system despite being quite well-off economically. In particular, high-wage one-earner couples retiring in the near future receive very large transfers, often exceeding \$100,000. Under our projections, positive subsidies continue to flow to high-wage one-earner couples retiring as late as 2050. Of course, fewer couples will fit this profile in the future. Even in the distant future, therefore, not all the subsidies provided by the Social Security system will be targeted in a fair or efficient manner or one that follows logically from a set of principles.

Chart 4 helps put these redistributive patterns in perspective by expressing the transfer to or from the Social Security system as a net lifetime tax rate. Many people undoubtedly think of their Social Security payroll contribution as a tax that just disappears into the government's coffers, providing them with little or nothing in return. Quite to the contrary, however, for most of the system's history Social Security contributions have yielded a tremendous return, so much so that on net, the system acted as a negative tax or subsidy from the government. As an extreme example, consider one-earner couples turning age 65 in 1980. Net lifetime OASI transfers represented 21.2 percent of lifetime income (measured as lifetime earnings subject to Social Security tax) for a low-wage worker with a nonwage-earning wife and two children. The corresponding figures for average- and high-wage workers in this year were 14.2 percent and 11.3 percent, respectively.

On the other hand, consider a high/average wage two-earner couple turning age 65 in 2030. This couple faces a lifetime loss from Social Security of about \$173,500. While the amount may appear quite large, it represents only a small portion of this couple's lifetime income—approximately 2.77 percent. In other words, if this couple faces a statutory OASI tax rate of 10.65 percent over most of their career, approximately 7.88 percentage points could be considered provision for their own retirement, while only 2.77 percentage points represent a transfer to the less fortunate. If the high-wage worker in this family were to earn more than the maximum wage subject to OASI taxation, moreover, the negative transfer would represent an even smaller portion of lifetime income. Of course, the reforms required to reach balance in the system almost inevitably will raise this net lifetime tax one way or the other.

As long as there is some transfer to low-income recipients remaining in the system—a natural consequence of a progressive benefit formula—it was inevitable that high-income recipients would eventually have to start paying more during their lifetimes than they took out. The transition to this type of system, although only partial and incomplete, has begun only recently. It was avoided for a long time by having each successive generation pay higher and higher tax rates to heavily subsidize the previous one. But once the baby boom generation retires, this will no longer be possible. What the tax rates in chart 4 illustrate is that despite the fact that high-income people finally will be required to pay for the redistribution to lower income retirees, the amount that they are giving up may still represent only a moderate portion of their Social Security payroll tax contributions.

One other factor to consider regarding Social Security's redistributive impact is that Medicare benefits add greatly to the subsidy going to current and near-future retirees. Estimates here are a bit sketchier because of the difficulty of projecting future Medicare spending growth, but in our book we make an effort to calculate the value of lifetime Medicare benefits and tax payments for some of our hypothetical workers, based on the best-estimates of the Health Care Financing Administration as of 1993. Among the highlights, high-wage one-earner and two-earner couples turning age 65 in 1995 are estimated to receive lifetime subsidies from Medicare of \$104,000 and \$81,100, respectively. Subsidies to high-income people persist longer into the future when we look at Medicare and Social Security

Table 1.—Lifetime OASI benefits, taxes, and transfers for hypothetical workers and families, selected years 1960-2030

[Constant 1993 dollars; in thousands]

	Sing	gle-male w	ages	Sin	gle-female	wages	One-ear	ner couple	wages	Two-ear	ner couple v	wages
Year cohort turns age 65	Low	Average	High	Low	Average	High	Low	Average	High	Low & low	Average & low	High & average
1960												
Benefits	\$30.1	\$45.5	\$50.6	\$45.7	\$69.0	\$76.7	\$66.3	\$98.9	\$111.0	\$76.8	\$102.0	\$122.1
Taxes	4.0	9.0	13.8	4.3	9.6	14.6	4.0	9.0	13.8	8.4	13.3	23.4
Net (transfer)	26.1	36.5	36.8	41.4	59.4	62.1	62.3	89.9	97.2	68.4	88. 7	98.7
1980												
Benefits	54.3	90.2	114.6	80.8	134.3	170.5	129.3	209.9	264.3	146.9	208.4	273.2
Taxes	22.9	51	71.9	24.2	53.9	76.1	22.9	51.0	71.9	47.2	75.2	125.7
Net (transfer)	31.4	39.3	42.7	56.6	80.5	94.4	106.4	158.9	192.4	99.7	133.3	147.5
1995												
Benefits	58.0	95.7	133.6	80.6	132.9	185.5	134.9	223.4	305.4	155.2	226.6	312.6
Taxes	45.4	100.8	170.7	47.2	104.8	179.0	45.4	100.8	170.7	92.5	148.0	275.5
Net (transfer)	12.6	-5.1	-37.1	33.4	28.1	6.5	89.5	122.5	134.7	62.6	<i>78.6</i>	37.1
2010												
Benefits	69.0	155.2	175.9	93.6	156.1	238.4	154.6	258.8	388.6	178.9	261.7	394.2
Taxes	68.2	151.5	310.8	70.4	156.5	322.4	68.2	151.5	310.8	138.6	221.9	467.3
Net (transfer)	.9	-36.3	-135.0	23.2	4	-84.1	86.5	107.3	77.7	40.3	39.8	-73.1
2030												
Benefits	84.0	139.6	220.3	113.7	189.0	298.1	187.4	312.8	493.0	215.9	316.5	498.1
Taxes	88.1	195.8	468.8	91.3	202.8	485.4	88.1	195.8	468.8	179.4	287.1	671.6
Net (transfer)	-4.1	-56.2	-248.5	22.5	-13.8	-187.3	99.3	117.0	24,2	36.5	29.4	-173.5

Note: All amounts are discounted to present value at age 65 using a 2 percent real interest rate. Adjusts for chance of death in all years after age 21. Includes actuarial value of all OASI workers, spousal, and survivors' benefits payable over a lifetime. Includes both employer and employee portions of OASI payroll tax. Husbands and wives are assumed to be the same age and to have two children born when parents are aged 25 and 30. Assumes retirement at OASI normal retirement age. Projections are based on the intermediate assumptions from the 1993 OASDI Board of Trustees Report. The OASI portion of the OASDI tax rate is set at 10.65 after 1992. (Some assumption was required for potential enactment of a reallocation from DI. Subsequent legislation set the OASI rate at 11.2 percent for 1993, 10.52 percent for 1994-96, 10.70 percent for 1997-99, and 10.6 percent for 2000 and thereafter.)

cash benefits combined—mainly because health benefits for the retired keep growing so fast relative to their past lifetime contributions. Eventually, the transfers turn negative for distant-future retirees; for instance, a high-wage two-earner couple turning age 65 in 2030 is expected to face a combined net transfer of negative \$350,600. However, it is worth noting that the combined lifetime Medicare and Social Security benefits received by such a family are expected to add up to \$920,800 in 1993 dollars.

Economic Status and Diversity of the Elderly

When debating what to do about a program meant to meet the needs of the elderly, it is worth considering just how needy the elderly are and who among them is most in need. Here, we will just summarize a few facts on this issue.

First of all, consider information about the "typical" elderly

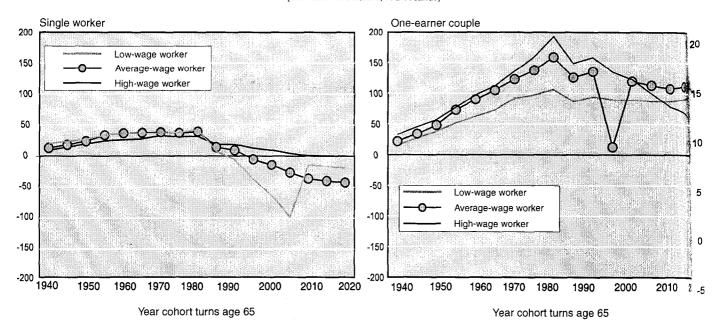
person. The Census Bureau publishes statistics on the median income levels (that is, the point where 50 percent of incomes are higher and 50 percent are lower) for households in various specific age groups. These figures are adjusted by a scale designed to reflect differences in living expenses associated with different size households. The median income of households headed by someone older than age 65 is lower than that for households headed by someone aged 20-64 (\$16,354 vs. \$22,571 in 1990). This is not surprising given that the elderly are far less likely to be working, although this income figure does include Social Security and pension benefits, dividends, interest, and so forth, which are more likely to accrue to elderly people. The very old, those older than age 85, have particularly low incomes, reporting a median of just \$11,307 in 1990.

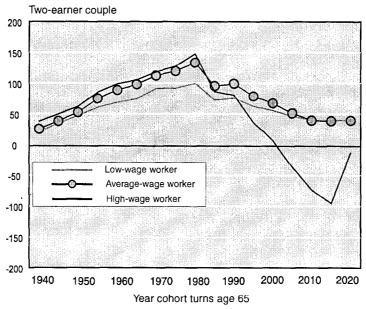
These Census figures do not adjust for the fact that the elderly typically face much lower tax rates than the nonelderly, and receive many benefits, such as Medicare, in-kind rather

Chart 3.—Net lifetime OASI transfer for hypothetical workers and spouses, selected years 1940-2020

[Constant 1993 dollars; in thousands]

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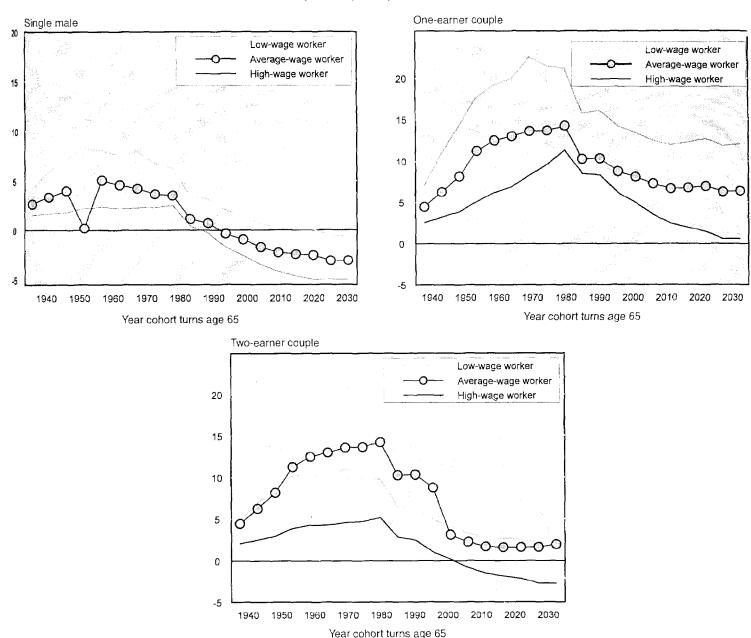
Note: Discounted to present value at age 65 using a 2 percent real interest rate. Adjusts for the chance of death in all years after age 21. Includes actuarial value of all OASI worker's, spousal, and survival benefits payable over a lifetime. Assumes retirement at the normal OASI retirement age and couples are the same age.

Source: The Urban Institute. C. Eugene Steuerle and Jon M. Bakija (1994). Retooling Social Security for the 21st Century. Based on data from the Board of Trustees of the OASDI Trust Funds (1993).

than in cash. There is evidence, moreover, that the elderly are far more likely to underreport their incomes to the Census Bureau than are the nonelderly, largely because property income often goes unreported and the elderly own much more property on average. Hurd (1990) shows that adjusting for these factors and looking at mean, rather than median, incomes can lead to the conclusion that the typical elderly person actually has higher income than the typical nonelderly person.

While it is questionable precisely how the *incomes* of the elderly and nonelderly compare, it is quite clear that the elderly have much more *wealth* than the rest of the population. According to Census figures, the median net worth of households with persons older than age 65 was \$73,471 in 1990, compared with a \$35,752 overall average for all households. The difference in means is also large: \$136,013 for the elderly vs. \$92,017 overall.

Chart 4.—Net OASI transfer for hypothetical workers and spouses as a percentage of lifetime income, selected years 1940-2030 [Tax rate in percents]



Note: All amounts converted to present value at age 65 assuming a 2 percent real interest rate. Adjusts for the spousal and survivors benefits in all years after age 21. Couples are assumed to be the same OASI retirement age.

Source: The Urban Institute. C. Eugene Steuerle and Jon M. Bakija (1994). Retooling Social Security for the 21st Century.

While on average, the elderly may be better off economically than the rest of the population, there is also a considerable amount of diversity within this population. In 1990, 12.2 percent of people aged 65 or older fell below the official poverty threshold (which was \$8,233 for an elderly couple). This was below the rate of 13.7 percent for people younger than age 65. Those most likely to face dire financial problems are the very old and widows. Women older than age 65 living alone had a

poverty rate of 23.6 percent in 1990. People aged 85 or older had a poverty rate of 20.2 percent, and nearly 40 percent had incomes below 150 percent of the poverty line.

The economic problems of the very old are compounded by a number of factors. First of all, they are far more likely than the younger elderly to require expensive long-term care, which is not covered by Medicare. Medicaid does pick up the tab for elderly people if they become financially ruined (or surrepti-

Table 2.—Effects of alternative retirement decisions on value of OASI for workers turning age 65 in 1995 [Constant 1993 dollars; in thousands]

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	Ma	le-worker wages		Female-worker wages			
Retirement decision	Low	Average	High	Low	Average	High —	
Retire at age 62							
Change in benefits	-0.2	-0.5	-4.6	-3.6	-6.2	-13.3	
Change in contributions	-3.2	-7.2	-17.7	-3.3	-7.3	-17.9	
Net gain (+), or loss (-)	+3.1	+6.7	+13.1	3	+1.1	+4.6	
Retire at age 67							
Change in benefits	+.4	-2.8	-8.0	+.5	-1.7	-4.3	
Change in contributions	+2.0	+4.3	+10.5	+2.0	+4.5	+10.9	
Net gain (+), or loss (-)	-1.6	-7.2	-18.5	-1.5	-6.2	-15.2	
Net OASI tax rate on							
wages after age 65	8.70%	17.60%	18.80%	8.00%	14.60%	14.80%	
Retire at age 70							
Change in benefits	+1.0	-7.4	-22.5	+1.5	-4.7	-13.9	
Change in contributions	+4.6	+10.2	+24.7	+4.9	+10.8	+26.1	
Net gain (+), or loss (-)	-3.6	-17.6	-47.2	-3.4	-15.5	-40.0	
Net OASI tax rate on							
wages after age 65	8.30%	18.40%	20.30%	7.40%	15.30%	16.30%	

Note: Table reflects change in actuarial present value of OASI benefits and taxes relative to retirement at age 65. All amounts are converted to present value at age 62, using 2 percent real interest rate. Includes impact on worker's benefit only. Those who delay retirement are assumed to register to begin receiving OASI benefits immediately at age 65. Includes both employer and employee portions of OASI payroll tax. Projections are based on intermediate assumptions in 1993 OASDI Board of Trustees Report. Assumes the OASI portion of the OASDI tax rate is set at 10.65 percent after 1992.

tiously transfer their resources to relatives), but this process is degrading for the elderly, costly to taxpayers, and unfair to those who play by the rules and save up to protect against such emergencies. As of 1985, 22.1 percent of persons older than age 85 were in nursing homes, compared with just 1.2 percent of those aged 65 to 74. The annual cost of a nursing home stay is now well over \$30,000 on average, and is increasing much faster than inflation. Meanwhile, Social Security benefits merely keep pace with inflation as retirees age, and private pension benefits tend to decline in real value over time because of a lack of inflation indexation. The elderly, therefore, are often faced with a situation where their economic resources decline over time while their economic needs often increase. People who retire early only exacerbate the likelihood of ending up with serious financial problems later. Their annual Social Security benefits are permanently reduced if they retire early, for example to 80 percent of their base level if they retire at age 62 rather than 65.

While many very old people are clearly very needy, the younger elderly or near elderly, particularly those in their sixties, are doing quite well on average even before taking into account capability to work. These younger elderly probably are also

better able to work than their counterparts from earlier generations. First of all, jobs involving strenuous manual labor are far less common in today's economy than in earlier eras. Second, great improvements in the technology and quality of health care have probably delayed the onset of debilitating illness and disability for much of the elderly population. The lengthening of life expectancies is one indicator. Still, it is true that one impact of improved health care is to keep some frail elderly people alive longer, which would limit any increase in the percentage of elderly people who can work.

Despite what is almost surely an increase in the ability of older people to work compared to earlier generations, we have seen a dramatic decline in their participation in the labor force. For instance, the labor force participation rate for males aged 60-64 declined from 82.9 percent to 54.7 percent between 1957 and 1992. The decline for males aged 65-69 was from 52.6 percent to 25.9 percent. Much of this decline is probably driven by the fact that each successive generation has been more prosperous and accumulated private savings, and simply decided to spend more of it on leisure. To the extent that this is the case, there is nothing wrong; it is just a voluntary choice. Even here, however, people may be systematically underesti-

mating their life expectancies, in which case they may eat up too many of their assets by retiring early, leaving them poorer or even destitute later on. Moreover, some of the trend towards earlier retirement is probably due to incentives of the Social Security system and other government programs, an issue we will address next. If this is the case, then the trend towards earlier retirement can lead to inefficiency as a greater portion of the government's budget, as well as of Social Security funds, are spent on those with relatively fewer needs.

What conclusions can we draw from this survey? For one, since the elderly seem to be in as good or better economic shape on average as the rest of the population, there is little reason to give ever larger subsidies to the elderly and near-elderly simply because they are old or almost old. Recall that a major factor behind the growth in cost of Social Security is that it is distributing larger and larger amounts to individuals further and further from the age of expected death. The share going to, say, those within 10 years of expected death has declined steadily over time. Yet it is a subset of the elderly—particularly those who are truly old, in their eighties and beyond—who are most in need. This suggests that to the extent that we are going to redistribute income towards those in need, we should be focusing more of it on the older elderly and less on those in their sixties.

Social Security and the Incentive to Retire

Social Security has many features that may affect peoples' retirement decisions. To the extent that people decide to retire either earlier or later than they otherwise would, there is likely to be some inefficiency and waste. For example, talented workers may be induced to leave the labor force, withdrawing their valuable skills from the economy, even though in the absence of Social Security's incentives they might have been happier to keep working. By working, they would also be contributing tax dollars to meet other societal needs like child poverty and crime, rather than withdrawing resources. If people are induced to retire too early, moreover, they will end up with fewer resources to spread over retirement, and are more likely to be destitute when they become very old and to put an additional burden on taxpayers through Medicaid or other programs.

Social Security may affect retirement decisions simply because it redistributes income from some groups to others. Changing the wealth of various people in this way could easily affect people's retirement decisions by making it easier or harder for them to afford retirement. This is not too troubling to the extent that it is the unavoidable side-effect of redirecting resources so as to reduce poverty and suffering among the elderly.

A second feature is Social Security's normal retirement age of 65 and the early retirement age of 62. These rather arbitrary ages have become enshrined as norms regarding when to retire, as people come to view these as the ages at which you are "supposed" to retire. The private sector takes its cue from these benchmarks as well, and designs pension plans and workplace rules with these ages in mind.

A third feature of Social Security that can affect retirement

decisions in a more complicated way, is the method for adjusting benefit levels for early and late retirement. Currently, if you retire at the "normal" retirement age (65), you receive 100 percent of the basic benefit amount, also known as the "primary insurance amount" (PIA). If you retire early, however, your benefit is subject to an "actuarial reduction." For example, if you retire fully at age 62, you receive a benefit equal to only 80 percent of the PIA for the rest of your life. If, on the other hand, you delay retirement until after age 65, you receive a "delayed retirement credit" (DRC). For workers turning age 65 in 1995, the DRC increases benefits permanently by 4.5 percent for every year retirement is delayed; for instance, if you retire at 67, you receive a benefit equal to 109 percent of your PIA. This DRC is scheduled to increase gradually for future generations of retirees until it reaches 8 percent per year for those reaching age 65 in 2008.

If you want to continue working yet still receive Social Security benefits, you are subject to an "earnings test." In 1993, the earnings test reduces Social Security benefits by 50 cents for every dollar earned over a basic exempt amount of \$7,680 for those younger than age 65, and 33 cents for every dollar earned above \$10,560 for people between ages 65-70. In 1996, legislation gradually raised the earnings thresholds for beneficiaries who have attained age 65 to \$30,000 by 2002. Workers aged 70 or older are exempt from this earnings test. Any benefits lost in this manner are compensated for at least partially by some actuarial adjustments, including a delayed retirement credit for work that occurred between ages 65 and 70.

Yet another feature that affects the incentive to retire is the fact that only the 35 highest earning years are included in the measure of average earnings used in the calculation of benefits. Because most people approaching retirement have already worked for 35 years, this means that an additional year of work at best will simply cause one low-earning year to be replaced by a new, somewhat higher earning year in the calculation of average earnings. Since past years' earnings are inflated by a wage index, this rarely has a significant impact. As a result, if you choose to work an extra year instead of retiring, the additional Social Security taxes you pay are unlikely to have much, if any, impact on your benefits.

Table 2 summarizes the impact of Social Security on the financial incentive to retire for a few hypothetical workers turning age 65 in 1995.8 Our examples assume that the worker has already survived to age 62, and illustrate how expected lifetime benefits and taxes will change if he or she decides to retire at age 62, 67, or 70 instead of 65. In all cases depicted here, Social Security provides a financial incentive to retire earlier rather than later. Retiring at age 62 does actually reduce expected lifetime benefits slightly, but the savings in payroll tax payments more than offsets the slight benefit loss. Retiring later than 65 reduces expected lifetime benefits, but more importantly, the extra payroll taxes paid provide little or no return in the form of higher benefits. In some cases, the penalty for working is quite high. For example, an average-wage worker choosing between continuing to work until age 70 and retiring in full at age 65 faces an implicit tax rate (extra taxes plus loss in

benefits) from Social Security of 18.4 percent on future earnings. The corresponding tax rate for a high-wage worker is 20.3 percent. These rates do not even count income tax rates or State taxes.

The results shown here only consider the impact on a worker's own benefit. If the worker's family also received spousal and survivor's benefits, the penalties for delayed retirement would generally increase, largely because spousal benefits do not receive delayed retirement credits. One qualification to these results is that the DRC is already scheduled to increase gradually in the future towards 8 percent in 2008. When this happens, workers will face little or no decline in expected benefit, but they still will receive little return on their additional payroll tax contributions, so there will remain a significant tax penalty for continuing to work.

Because of the complexity of actuarial calculations and the various rules involved, it is unlikely that many people have a good picture of what the net financial incentives in OASI really are. There is very good reason to believe, however, that the perceived penalties for delaying retirement are even greater than the penalties previously described. One reason is that the reduction in immediately available cash benefits caused by the earnings test is visible and relatively easy to understand. Offsets to the earnings test, such as the DRC and reductions in the actuarial penalty for early retirement, are less widely known and more diffuse in their impact. Indeed, most newspaper stories attacking or praising the earnings test have enough trouble trying to explain its operation, and rarely even mention the benefit offsets.

A second reason may be that people approaching old age underestimate their remaining life expectancies, perhaps because they compare themselves to parents with shorter life expectancies or because they are unaware that their life expectancy, given that they survive until retirement, is considerably longer than the commonly reported life expectancy from birth. If this is the case, then even if they understood the delayed retirement credit, they would not give it adequate weight.

Data on the work patterns of the elderly provide one piece of evidence that the earnings test and other related rules have an impact on retirement decisions that is out of proportion with the actual financial incentives. A large portion of OASI beneficiaries who work have wages just below the earnings test threshold (Leonesio 1991, p. 15). There is a particular clustering within a thousand dollars below the threshold. The number of people earning wages just above the threshold is extremely small by comparison. This occurs despite the fact that the additional penalty for working beyond this threshold is extremely small. Between ages 62 and 65, the loss in current benefits would be almost completely offset by a smaller actuarial reduction in the long run. For those aged 65-70, the offset provided by the DRC is not complete, but is still large enough that the reduction in lifetime benefits for earning just above the threshold is modest. The fact that one receives little return on payroll taxes for working past age 62 is true regardless of whether the person is above or below the threshold.

This evidence suggests that in the face of incentives and

rules that are often too complicated to be deciphered easily, retirees take the simple signals sent by the Social Security system—what is the appropriate age to retire, what is the maximum amount of earnings that will not result in a loss of benefits—and live according to them. This impression is reinforced by the clustering of retirements very heavily around Social Security's "early" and "normal" retirement ages of 62 and 65. In fact, as of 1991, only 11.6 percent of the population worked past age 65 at all, suggesting that retirement before or a age 65 has become a very strong norm of behavior.

Spousal Benefits and Returns to Secondary Workers

Social Security offers supplemental benefits to the spouses and survivors of insured workers. These benefits are directly proportional to the size of the primary worker's benefit. The spouse of a retired worker is eligible to receive a benefit equal to 50 percent of the primary worker's basic monthly benefit (PIA). In addition, a retired widow or widower is eligible to receive a survivor's benefit equal to 100 percent of a deceased worker's benefit. If a spouse also has a benefit based on his or her own earnings record, which is less than the available spousal or survivor's benefit as is often the case with working women, he or she essentially receives the larger of the two benefits. As we saw earlier, these rules play a large role in the distribution of benefits between one-earner and two-earner couples. Their effects on the equity of the system and on incentives are deserving of serious scrutiny.

Upon what principles are spousal benefits based? The basic justification must be the same as that for the program as a whole: the needs of the elderly. Households with two people need more money to support themselves than households with one. Many elderly couples—in particular, those alive in earlier years of Social Security—were removed from poverty thanks partly to spousal benefits. Many widows would also fall into poverty if they did not gain access to survivors' benefits earned through their spouses' earnings history.

If spousal benefits were based mainly on need, however, they would be governed by the progressivity principle and would be targeted where the needs are greatest. In the American system, however, just the opposite occurs: The size of spousal benefit is related inversely to need.

How does this occur? Because the spousal benefit is set at 50 percent of the primary worker's PIA, the two rise in tandem. The higher the income of the worker, the greater will be the value of the spouse's benefit. Survivors benefits work the same way. Consider male workers in the cohort turning age 65 in 1995 who have a nonwage earning spouse and two children. By our calculations, the annuity value of lifetime spousal and survivors benefits (over and above the worker's benefits) is approximately \$76,900 if the worker has low wages, but rises to \$127,700 if he has average wages, and \$171,800 if he has high wages.

Certainly such a transfer to higher income individuals cannot be justified on the basis of need. Perhaps, therefore, appeal might be made to one of the other Social Security principles. How about individual equity or an analogy to private insurance? Here, again, no rationale can be found. For example, two male workers with identical earnings histories will pay the same amount of tax contributions. If one of these workers has a nonwage-earning spouse, however, he will receive a far greater return on his contributions. As we saw earlier, if he retires in the near future his family's benefits will greatly exceed the annuity value of his contributions, regardless of his income level, whereas a worker without dependents may receive less than a full market return on his contributions. Following a principle that benefits ought to be related directly to contributions, the existing benefit distribution could only be justified if workers who wanted to receive spousal benefits were required to pay higher premiums during their working years.

Horizontal equity likewise does not justify the observed redistributive patterns. The spousal benefit does not treat equally those in equal need, provide equal rates of return on past contributions, or even treat all spouses equally. The efficiency of the system is not enhanced by this regressive redistribution either. Benefits are not related to taxes, and taxes on workers are higher than would be required if there were less redistribution to spouses at the top of the income scale.

Suppose we take the spousal benefit outside of the employee insurance world and treat it as a type of "family" benefit. Could the current structure of spousal benefits be justified by some societal desire to compensate people for the costs of raising children? No, here, too, the structure would be found wanting. Suppose, for instance, that the spousal benefit is viewed as one based on "shadow wages" for uncompensated work raising children in the home. The implication of larger spousal benefits for upper income households would then be that society places a much higher value on child care given in high-income households than in low-income households. High-income parenting would be valued more than low-income parenting. Single parents and many two-earner couples, moreover, receive no spousal allowance despite their efforts at raising children.

Since no principle has been found that justifies this particular pattern of distribution, perhaps it may be thought that a last appeal can be made to some "natural" order in the design of pension plans, that is, that spouse's benefits are often a given percentage of the worker's benefits. In a private insurance scheme, however, those who want to receive spousal benefits of this sort usually would either have to pay higher premiums, or have their own benefits adjusted in such a way that the total actuarial value would not rise. International experience also calls this line of reasoning into question. Most comparable nations, including Canada, France, Sweden, the United Kingdom, and Japan, provide support to spouses that is unrelated to the income of the higher earning spouse. These other countries typically aid nonwage-earning spouses through either a uniform universal benefit or a flat spousal benefit.

Aside from equity problems, the current design of spousal benefits also has some destructive effects on the incentive to work. The lesser earning spouse in a family may contribute a substantial amount to Social Security over a lifetime, but receive little or no marginal increase in retirement benefits over what would have been obtained had he or she not worked at all. Many spouses, particularly women, do not earn enough over their careers to yield OASI benefits greater than half of the primary worker's benefits. These spouses receive no marginal return on their contributions at all. Even those secondary workers who earn benefits much larger than the available spousal benefit are typically receiving only a small marginal return on their contributions.

Another consequence of the current spousal benefit scheme is that two couples with exactly the same lifetime incomes and contributions to the Social Security system can receive very different benefits (table 3). In these cases, a twoearner couple will almost always fare worse than a one-earner couple. For example, let us compare two couples turning age 65 in 1995, each of which have family incomes equal to the maximum earnings subject to OASI tax (\$57,600 in 1993). For our purposes here, we assume they are identical in all respects except that in the first household, the husband carns all of the income, while in the second, each spouse earns one-half of the income. The one-earner couple will receive an annual benefit of \$20,399 (in constant 1993 dollars) while both spouses are alive. In the likely event that the husband dies before the wife, she will receive a survivors benefit worth \$13,599 annually. The two-earner couple, by contrast, receives an annual benefit of \$18,229 while both are alive, and just \$9,115 when only one survives. Thus, the one-earner couple's benefit is 12-percent larger than that of the two-earner couple when both are alive, and 49 percent larger when only one is alive. Because the two couples made identical contributions to the system, and presumably the two-earner couple has at least as much need, this is a clear case of horizontal inequity.

Table 4 illustrates the very small returns that working women often receive. It demonstrates the percentage increase in a family's lifetime OASI benefits and contributions when a wife works, compared to a situation where the wife does not work for wages at all. We use couples from the cohort turning age 65 in 2030 (currently in their early thirties) as an example, although the results would be similar for almost any cohort.

Consider, for example, a family where the husband earns at least the maximum wage subject to Social Security tax in every year. If the wife earned the average national wage every year for 46 years, the family's lifetime Social Security contributions would increase by almost 43 percent. The value of the family's lifetime OASI benefit, however, would only increase by about 1 percent compared to what would be received if she never worked at all. A similar story holds true for families with more modest incomes as well.

Options for Reform

So far, we have demonstrated that for all its achievements and popularity, our Social Security system must inevitably be reformed because of a significant financial imbalance. Moreover, there are numerous features of the system that are inequitable, inefficient, or both. Because of the compromises

that are required in designing any public system, at least some problems of this sort are unavoidable, but there is room for improvement.

We have also demonstrated that while reform is necessary, the financial problems of the Social Security cash benefit program are not so large that it must necessarily be scrapped altogether. A set of moderate reforms could restore financial balance while improving the equity and efficiency of the system. While total replacement of the Social Security system might increase societal saving, it could also abandon the existing system's undeniable success at reducing poverty and insecurity among the elderly. The principles we laid out, however, establish a strong case for beginning the process of reform as soon as possible.

One reason for acting soon is that individuals make plans on the basis of expectations. Expectations of Social Security benefits strongly affect decisions about age of retirement, private saving patterns, and consumption levels before and after retirement. Once these decisions are made, it is difficult to change them suddenly in response to new Social Security rules. For this reason, Congress cannot easily alter the benefits of current or near-future retirees without being unfair and possibly causing serious hardship. Delay in reform puts more and more pressure on policymakers to implement changes that will affect recipients immediately, without any time delay that would allow people to adjust their plans. It could also increase the extent to which benefits would have to be cut, taxes raised, or both.

We know that expectations formed around existing tax rates and existing benefit formulas cannot be entirely accurate—as already noted, the two are incompatible. Fortunately, taxes are currently sufficient to support benefits for the near future, implying that changes can gradually be phased in if they are enacted relatively soon.

The next few years should be viewed as a crucial period of opportunity during which the Nation should be preparing itself

Table 3.—Two couples turning age 65 in 1995 with identical contributions, who can receive different benefits

[In constant 1993 dollars; in thousands]

Annual benefit	One-earner couple; husband earns maximum wage subject to OASI tax (\$57,600)	Two-earner couple; each earns one-half of maximum taxable wage (\$28,800)
Benefit when both spouses are alive	\$20,399	\$18,229
Benefit when only one spouse is		
alive	13,599	9,115

Note: Husbands and wives are assumed to be the same age and to retire at the same normal OASI retirement age—65.

Table 4.—Marginal returns from OASI wage-earning women turning age 65 in 2030

	Percentage	Net increase in	
Family type	Family OASI contributions due to wife working	Family OASI benefits due to wife working	benefits as a percentage of net increase in contributions
High-wage husband and low-wage wife	43.3	1.0	2.5
Average-wage husband and low-wage wife	46.6	1.2	4.1
Low-wage husband and low-wage wife	103.6	15.2	31.2

for the demands of the future. We should not be lulled into inaction by the relatively small retiree population in the near term, as a potent demographic challenge looms right around the corner. Rather than responding later to a crisis that could have been avoided, policymakers should prudently prepare for the inevitable so that Social Security recipients and taxpayers can themselves prepare for their own futures.

With this in mind, in this section we explore a number of options for reform that could be pursued within the context of the existing system, which as a whole would help restore fiscal balance while improving the equity and efficiency of the system. Our purpose in the book was not to outline a precise proposal for reform, but to show how closely different options were likely to follow, or not follow, from basic principles. Given these principles and the facts about the Social Security system and the elderly developed earlier, however, this review will point to a few goals that any major reform effort should encompass:

- First, to the extent that overall benefit growth needs to be reduced, the redistribution that occurs in the system should be targeted more on the truly needy, particularly the very old.
- Second, features of the system that encourage the relatively well-off near elderly to retire earlier should be pared and, in some cases, eliminated. Our best hope for dealing with massive increases in the number of elderly relative to young people in our society is to move to a norm where people work a bit longer, as opposed to a society where retirement spans last for ever-increasing periods of time.
- Third, efforts should be made to improve the equity and efficiency of Social Security in such areas as the treatment of spouses and survivors.

In what follows, we will examine a number of specific possible reforms in light of these goals.

Tax Rates and Expanding the Tax Base

A traditional method of dealing with shortfalls in Social Security has been to increase tax rates or to expand the tax base. Now that the Social Security tax is the largest tax paid by most households, there is more reluctance to pursue this direction. Nonetheless, options here still must be examined and compared. Tax rate proposals in recent years have involved both rate increases and decreases. The decreases are sometimes favored by those who would move the system more to a pay-as-you-go system—Senator Daniel Patrick Moynihan (D-NY) made such a proposal a few years ago—but the decreases today would soon be offset by increases in the future. Even without a decrease today, it may be unlikely that we will be able to avoid completely any increase in the tax burden to support programs for the elderly. Nonetheless, tax increases for Social Security would further orient the Federal budget, at least in relative terms, toward programs for the elderly and away from other societal needs.

An alternative to tax rate increases is to change the tax base. One common proposal is to raise or even eliminate the limit on taxable earnings for OASDI. Because about 87 percent of wages and salaries in covered employment already fall below this cap, the amount of revenues that can be raised is small. One great difficulty, at least in appearance, is that as long as the benefit formula is not capped, these tax increases could result in benefit payments that become very large for very rich people. A second problem is related to the efficiency and horizontal equity of the tax base: Those who are self-employed include capital income in earnings subject to Social Security taxation, whereas corporations and most individuals include returns to capital as dividends or other payments not subject to Social Security tax.

Broadening the tax base by eliminating tax preferences is a form of base expansion that would reduce the long-term deficit and increase the efficiency and horizontal equity of the tax system without raising tax rates. A strong case can be made that two workers with equal economic resources should pay the same amount of tax. In addition, this Social Security tax (and income tax) discrimination causes a number of distortions, such as inducing individuals to take greater shares of labor compensation in nontaxable form. Growth in employee benefits, moreover, is a significant—although not dominant—cause of projections of long-term deficits in Social Security. Edith Fierst, a member of the recent Social Security Advisory Commission, advocated trying to cover some of Social Security's shortfall by dealing with nontaxable compensation.

Taxation of Benefits

One approach that has been relied upon in recent years has been income taxation of benefits. A portion of Social Security benefits was subject to income taxation for upper income people for the first time in 1983; this portion was expanded in 1993. Currently, up to 85 percent of benefits can be subject to tax for people whose incomes exceed certain thresholds. Still, only 25 percent of recipients pay any taxes on their benefits, and the net reduction in benefits is only 3.5 percent. 10

Income taxation of benefits is a relatively easy way of reducing benefits moderately in a progressive manner; those with incomes too low for taxation are not affected at all, while those who have the largest incomes in retirement, from whatever source, face the largest reduction in net-of-tax benefits. A related advantage of taxing benefits is that it affects the elderly at a point in the life cycle when they are best able to afford it. Progressive income taxation typically has a diminishing impact as an elderly person ages. Total income, including work earnings and unindexed pensions, often declines in later years of retirement. Meanwhile, exemptions, standard deductions, and rate brackets in the income tax increase because they are indexed for inflation. Accordingly, a larger share of income falls into a lower tax bracket or becomes exempt from taxation. Thus, income taxation allows retirees to keep more of their benefits when their needs are likely to be greater.

In light of the redistributional patterns illustrated earlier, taxation of Social Security benefits for current and near-future retirees can also be justified in terms of individual equity. Most current retirees who earned very high incomes during their careers are receiving large transfers above and beyond the fair annuity value of their contributions and some above and beyond what many poor elderly and nonelderly are receiving or ever will receive. This last rationale for taxing the benefits of current and near-future retirees, however, is less applicable to those retiring during the next century, when most high-income workers can be expected to receive less than a fair actuarial return on their Social Security contributions.

The savings to be achieved through taxation of benefits are significant, although not a panacea. Legislation passed by Congress in 1993 increases the portion of benefits subject to tax for those with incomes above a second set of thresholds (\$34,000 for singles and \$44,000 for joint returns), and raises the maximum taxable portion to 85 percent. This was expected to raise an extra \$4.6 billion in 1995. The present value of extra revenues over the next 75 years is expected to be between 0.3 and 0.4 percent of OASDI's taxable payroll. Taxing 85 percent of benefits while eliminating the income thresholds would have a much larger impact in the short-run, raising about \$24 billion in 1995. The difference over the long-run would be smaller, however, because the thresholds are already scheduled to decline in real value over time.

For a variety of reasons, therefore, taxation of Social Security benefits is one of the more appealing choices among an array of unpleasant options to reduce net benefits. It does, of course, have drawbacks associated with basing taxation on an annual income measure. For instance, it will reduce slightly the incentive to save for retirement or to work during retirement, since either activity will increase annual retirement income and result in a slight reduction in one's net Social Security benefits.

Cost-of-Living Adjustments

A familiar proposal for restraining the growth of Social Security spending is to reduce, delay, or eliminate cost-of-living adjustments (COLAs), which index social insurance benefits for inflation. Lately, there has been much attention focused on the idea that the index used to determine COLAs overestimates changes in the cost of living. Social Security bases its COLA on the consumer price index for urban wage and clerical workers (CPI-W). Economists generally agree that this index overstates and, indeed, was never really meant to measure changes in the cost of living. First of all, the index attempts to adjust only for some changes in quality, but even these are very hard to measure and probably are underestimated. Secondly, the price index is based on observed price changes for a fixed basket of goods. This fails to take into account how consumers shift their spending towards items that become relatively cheaper. While there is plenty of agreement that these are problems, there is little evidence on how much they actually cause the index to be overstated. Guesses have ranged from a small fraction of a percent per year to more than a full percentage point.

While every effort should certainly be made to measure inflation as accurately as possible, there are some problems with COLA reductions as a method of reducing benefits. During the aging process, the incomes of the elderly already tend to fall relative to average incomes in the economy. Recall that while the nonelderly often receive real wage increases, a large portion of the elderly are dependent mainly upon Social Security, which is indexed only for inflation, and upon private pensions, most of which are not indexed at all. Thus, even if the CPI were mismeasured, reducing or eliminating COLAs would cause the incomes of the elderly to fall even faster as they aged. Proposals to reduce COLAs to a percentage point or two below inflation every year are particularly bad in this respect. Since needs tend to increase and abilities decrease at older ages, one would expect that a progressive need-oriented system like Social Security would attempt to increase real benefit levels over the aging process, rather than decrease them. Cutting back on COLAs moves the system in exactly the opposite direction. If anything, for a given value of lifetime annuity, we should be considering reducing initial levels of benefits, and then have them grow at a faster rate throughout retirement, in order to gear the program more towards those who are neediest.

Slowing Benefit Growth from Cohort to Cohort

As we discussed earlier, the Social Security benefit formula currently is indexed so as to increase initial benefit levels for each successive cohort of retirees in line with wage growth. As a result, benefit levels can be expected to grow significantly for future generations of retirees. One relatively easy way to slow benefit growth would be to index these initial benefit levels at a slower rate. This would very gradually ease the growth in total benefit spending over time, without causing benefits to decline in real purchasing power below the levels received by today's

retirees. In this way, an adequate minimal level of protection could still be maintained through Social Security, but more of the responsibility for attaining a comfortable retirement could be shifted to private saving. There are many variations on this theme. For example, modest levels of benefits could be indexed to wages, while higher levels of benefits (or the higher brackets in the Social Security benefit formula) could be indexed to prices.

Double-Decker or Two-Tier Social Security Systems

A more fundamental reform of Social Security benefits would be to replace the current system with a system that has two "decks." (One proposal of the recent Social Security Advisory Council moved exactly in this direction and suggested a basic first deck of a flat benefit, to which would be added mandated private accounts in a second deck.) One advantage of this type of approach is that it would make a clearer separation between the transfer (progressive redistribution) and pension (individual equity) components. International evidence does not support the view that a double-deck structure would necessarily reduce progressivity, although it obviously depends upon the particular proposal and size of the first deck or basic benefit.

A related approach creates a two-tier system with a transfer tier outside the Social Security system through a means-tested program financed out of general revenues. One consequence of this approach is that need would be measured on the basis of annual income, rather than lifetime earnings. Means-tested benefits would also cause a number of problems of horizontal equity, as those with substantial lifetime ability to cover their own costs of retirement could easily avoid saving for retirement or could transfer their assets to their children and then turn unnecessarily to other taxpayers for support.

Eliminating Drop-Out Years

The current Social Security benefit formula bases benefits on an average of the 35 highest earning years from an individual's career. While this might seem like a rather minor feature, it is also one that is particularly hard to defend. Because of this rule, years of work beyond 35 receive little or no marginal return from the Social Security system in the form of higher benefits. As a result, the effective marginal tax rate from Social Security is at or near the full statutory rate in these years. This is inefficient because it unnecessarily harms work incentives, particularly for those near retirement. It violates norms of individual equity because no return is received for these extra years of contributions. It is also horizontally inequitable. Consider two people who make equal contributions to Social Security over their lifetimes. If person A makes those contributions over 45 years while person B makes them in 35 years, person A can end up with a much lower benefit level. Finally, in many cases it is regressive, since it often benefits people who have high lifetime incomes but delay entry into the labor market by attending college and graduate school. For all these

reasons, some change should be made to this particular feature of the system. One approach would be to add up *all* lifetime earnings and divide by 35 (or some other number) to determine the earnings base (no longer strictly an "annual" average) used to calculate benefits. The benefit formula could then be readjusted so that benefit levels do not change very much on average, or so that total cost of benefits hits whatever target level is desired.

Minimum Benefits

Today, over half of all retirees do not have significant employer-provided pension income, and this situation is expected to prevail many decades into the future. Thus, many elderly people will still be primarily dependent upon Social Security for their retirement income. Many of the possible benefit reforms in Social Security would cut back the growth in benefits. Making sure there is an adequate minimum benefit—for instance, by adjusting some special minimum benefit or by changing the benefit formula to provide higher rates of return to those with low lifetime earnings—can be used to assure that low-income individuals are not hurt by other changes. Indeed, minimum levels of benefits would be used as an efficient way to remove greater proportions of the elderly from poverty.

Increasing the Retirement Age

As noted earlier, longer life spans have greatly increased the cost of old-age assistance since the inception of the program. For a 62-year-old single retiree in the 1990s, the system can already be expected on average to provide a pension lasting close to two decades. For a couple of that age, a pension will last on average one-quarter of a century. Suppose Social Security were to be enacted anew and that its drafters accepted the same basic goals put forward in 1935: to meet the needs of those in their last years of life. Given what we now know about the relative well-being of the near elderly and the younger elderly, it is highly doubtful that such a large share of total resources would have been devoted to those younger groups of near elderly or elderly who are so well-off. As originally designed, most individuals received benefits for fewer years of retirement than today, allowing scarce resources to be devoted where they appeared to be needed the most.

Among various options for restraining benefit growth, therefore, an increase in the retirement age is one of the easiest to justify under Social Security principles. The near elderly and younger elderly are relatively well-off. In terms of current income, they have on average much more than the older elderly. Their income on average is as high, if not higher, than that of the nonelderly population, and this calculation does not even take into account the potential earnings ability of those who are retired. In terms of wealth, they are among the richest of all age groups.

In response to improvements in longevity and rising costs, the 1983 Social Security Amendments scheduled a gradual increase in the normal retirement age (NRA) from 65 to 67, to be

phased in gradually over approximately two decades at the beginning of the next century. The scheduled increase in the NRA will roughly offset projected increases in longevity between the early 1980s and the time it is fully phased in, but will not provide any offset for growth in life-spans before or after.

Further changes in the retirement age can be implemented over time so that no current retiree suffers a benefit loss. They can be timed so that most of the impact is felt when the demographic hump—the retirement of the baby boom population—reaches its peak. The NRA, for example, could be scheduled to rise gradually until it ultimately reaches age 69 for those turning 65 in 2026. The Social Security Administration estimates that this particular plan would improve the 75-year actuarial balance in OASDI by 0.77 percent of taxable payroll. If the NRA was further raised to age 70 for those reaching age 65 in 2032, the long-run actuarial balance would be improved by a total of 0.97 percent of taxable payroll. Under the latter approach, the average remaining life expectancy at the NRA, when fully phased in, would be about 18 years for a female and 14 years for a male; the numbers would be larger for early retirement. These average retirement spans would still be longer than they have been over most of Social Security's history. Such a change would go a long way towards bringing benefit outlays closer to tax revenues.

Increasing the retirement age—especially if it is indexed over time—reduces even further the long-term deficit between annual receipts and payments. Because the increases are phased in over time, their full value to the long-term viability of the program tend to be understated in 75-year calculations of actuarial balance because there is little effect in the first few years or even decades, whereas the saving in costs compound over time.

One important question regarding an increased normal retirement age concerns how people are likely to respond. Because it serves as an important signal of when one "ought" to retire, a higher NRA may help create a new norm where people work a bit longer. Some people may decide to work longer in order to ensure an adequate level of income for themselves later in retirement. Still, as long as there is an early retirement option, many people are likely to continue to retire early and accept reduced benefits for the rest of their lives. Currently, scheduled law retains an early retirement age of 62 even as the NRA increases toward 67; when the new NRA is fully phased in, those retiring at age 62 will receive just 70 percent of a full benefit. Gradually raising the earliest age at which OASI benefits can first be obtained would help maintain benefits at an adequate level when they are really needed, at more advanced ages. Granted, there are some people who are too disabled to keep working in their early sixties, and need assistance. However, this is the case today with people in their fifties as well, and we rely on other mechanisms such as the Disability Insurance system to take care of them. Since these other mechanisms may also need to adjust over time, this only furthers the argument for implementing changes in Social Security early so that they can be phased in—and adjustments made—gradually over time.

Eliminating the Earnings Test

Eliminating the earnings test at all ages would probably be the simplest way to reduce one of Social Security's inefficient influences on retirement decisions. As noted earlier, that test acts as one more powerful signal that one should stop working, causes a financial penalty for continuing to work, and almost certainly creates a perceived financial penalty that is much larger than the actual one. In 1996, Congress increased the earnings test exempt amounts for those between the normal retirement age and 69 to \$30,000 by 2002, but left the exempt amount for those under the NRA at \$8,640 for 1997, indexed thereafter. While this removes many penalties, it still leaves many confusing and conflicting signals. Abolishing the earnings test also would greatly simplify the administration of the system, since the earnings test is the largest source of errors in benefit calculations. Many corrections of benefit amounts are required as earnings change over time, and taxpayers are extraordinarily confused about what is occurring. The delayed retirement credit would then become unnecessary in most cases, although it should still be made available to those who choose voluntarily to forgo benefits after the normal retirement age.

Removing the earnings test, by itself, might not have a large impact on behavior. In combination with the other changes discussed previously, such as increases in the normal and early retirement ages and elimination of drop-out years, it could eventually have a significant impact on the work patterns and behavior of the near elderly and elderly. Such reforms, moreover, could serve as an important first step in a transformation of social attitudes. Work, at least on a part-time basis, could once again become a norm for those in their sixties.

Earnings Sharing and Other Options for Improving Spousal Equity

Among the options sometimes proposed to deal with the problems of married couples has been to allow for "earnings sharing." Although the proposal may take various forms, its essential ingredient is the splitting of earnings of each member of a couple and the generation of separate earnings records for all individuals. For example, if a husband earns \$40,000 in a year and his wife earns \$20,000, each might be credited with \$30,000 of earnings for Social Security purposes. Each would eventually receive a benefit calculated separately on the basis of his or her own earnings credits. Some proposals would also give special credits for nonworking years when child care is involved.

A variety of studies (Zedlewski 1984; Social Security Administration 1985; Congressional Budget Office 1986; Center for Women Policy Studies 1988) have examined the potential winners and losers under an earnings-sharing approach. These studies come to the common conclusion that relative to the current system, two-earner couples would gain a greater share of total Social Security benefits under an earnings-sharing approach. This should not be surprising since nonwage-

earning spouses of high-income workers receive very large net transfers that are unrelated either to earnings or to need, whereas an earnings-sharing system would tend to guarantee that benefits are related more closely to earnings.

Whether one goes all the way toward an earnings-sharing approach or not, both the need-based nature of Social Security and its individual equity components could simultaneously be improved by redesigning the ways in which couples are treated. The basic principles of the program—essentially that some minimum or need-based grant be made to almost everyone and that all contributions should receive some rate of return—can be carried over to the treatment of spouses. To begin to achieve this goal, initially the spousal benefits of the richest spouses could be capped—for instance, not be allowed to grow in the future—and the revenues used gradually to provide some rate of return on those contributions for which no return is currently provided. One simple goal would be to provide a flat minimum spousal benefit for all spouses, as is done in most other countries.

As for providing credit for years spent caring for children, we believe that this can best be done either by allowing some adjustment to a minimum benefit for years of childrearing or by providing a flat minimum earnings credit for all spouses during years in which children are being raised in their homes. Eventually, this might come to replace the spousal benefit altogether. Such an approach would tend to give equal treatment to all who provide child-care. One proposal—to provide extra "drop-out years" in the calculation of average earnings for those who raise children—creates several problems. It tends to give higher earnings credits in years of no work to higher income individuals—once again, valuing their child-care more than that of low-income individuals. Increasing the number of drop-out years also reduces the marginal incentive to work and contribute to the system in any given year. Many Social Security contributions would continue to receive no return. For instance, the many people who work part time during childrearing years would often find that they received no additional benefit for the extra contributions that they made.

With respect to cases of divorce, a decision simply has to be made regarding the rights accorded to the divorced spouse. Earnings sharing implies that Social Security benefits should be treated as earned equally during years of marriage. One does not need to wait for earnings sharing to apply such logic. The worker's basic benefit, plus any spousal benefit deemed earned (however calculated), could be shared equally with a spouse of many years, or spread proportionately according to number of years of marriage, especially in the case of several spouses.

For administrative reasons, as well as problems of transition, these changes would need to be phased in over time. The longer the delay, however, the longer that the existing system will tend to provide significant welfare-like transfers to high-income individuals, to imply that high-income parents provide child-raising services more valuable than low-income parents, and to sustain unnecessarily high poverty rates for divorced persons.

Conclusion

It is not uncommon for discussions of Social Security to begin with one of two striking, but contrasting, conclusions: that either the system is in an extraordinary crisis or that all of its promises are sacrosanct and can easily be met with only a bit of legislative tinkering. Neither is true. An imbalanced system with inconsistent promises cannot help but be reformed. Even if significant future deficits in the system were viable as a matter of social policy, they cannot be tolerated from a fiscal policy standpoint. At the same time, reforms can be made in a way that is evolutionary rather than revolutionary, and the required benefit or tax changes can be kept moderate. Even if benefit cuts are implemented, they can easily be designed so that real benefits are not reduced over time, only cut back relative to current promises of future growth.

The process of addressing Social Security's financial imbalance also provides an opportunity to address other inefficiencies and inequities associated with the system. Among the key problems are incentives to retire early, large subsidies given to current and near-future upper income retirees, inequitable and inefficient treatment of many working women, and an inadequate focus on the needs of the very old. A variety of changes examined earlier, including taxation of benefits, elimination of drop-out years, raising the retirement age, abolishing the earnings test, and redesign of spousal benefits, could all be combined into a package that restores financial balance to the system while at the same time addressing what we believe should be, and often have been, fundamental equity and efficiency principles of Social Security.

Notes

- ¹ Our analysis here primarily addresses reforms to the current system and does not provide a fuller discussion of mandatory savings accounts, as suggested by the 1994-1996 Advisory Council on Social Sccurity. See, however, Steuerle (1997).
- ² These life expectancy projections for individuals are slightly higher than those appearing in the Social Security Trustees Reports. These projections are from cohort-based life tables, which project improved future mortality rates while the projections in the Trustees reports are from period-based tables, which assume age-specific mortality rates for a cohort once it attains age 65.
 - ³ According to the 1997 Social Security Trustees Report, 41.9.
 - ⁴ See 1997 Social Security Trustees Report.
 - ⁵ See 1997 Social Security Trustees Report.
 - ⁶The 1997 Trustees Report projects 7.1 percent in 2030.
 - ⁷ Based on data from the 1997 Social Security Trustees Report.
- ⁸ These calculations do not include the effects of the above mentioned 1996 legislation that reduced the earnings test by increasing the amount retired recipients could earn without penalty.
- ⁹The Social Security Amendments of 1983 required beneficiaries with incomes of more than \$25,000 if single, and \$32,000 if married, to include up to 50 percent of their benefits in their taxable income. The Omnibus Budget Reconciliation Act of 1993 required beneficia-

ries with incomes of more than \$34,000 if single, and \$44,000 if married, to include up to 85 percent of their benefits in their taxable income.

¹⁰ See Committee on Ways and Means, U.S. House of Representatives, 1996, *1996 Green Book*, U.S. Government Printing Office: Washington, DC, p. 43..

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